

# LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

Vol. 7, No. 6

Nov. - Dec. 1997

## Preliminary Atlas of the Ranunculaceae of Long Island, New York

The Flora Committee has been working for the past year on this fourth contribution to an atlas of Long Island plants. This installment treats the Ranunculaceae or buttercup family. As with the preceding treatments we have followed the names as presented in the Flora of North America. The latest (third) volume of FNA covers the Ranunculaceae, and includes the following name changes that may not be familiar:

*Anemone americana* (DC.) H. Hara for *Hepatica americana* (DC.) Ker.; common name: round-lobed hepatica. Recent research indicates that *Anemone*, *Hepatica*, and *Pulsatilla* all belong to the same genus.

*Ranunculus aquatilis* L. var. *diffusus* Withering for *Ranunculus trichophyllus* Chaix ex Vill.

*Thalictrum thalictroides* (L.) Eames & Boivin for *Anemonella thalictroides* (L.) Spach. Recent research adds support for including *Anemonella* in *Thalictrum*.

Two species are reported from Long Island which are almost certainly cultivated: *Clematis viticella* L. was collected twice in 1877 in Queens (at Prince's Garden and at College Point); *Trollius laxus* Salisb. was collected once in the mid-1800's from Brooklyn.

As always, if you have additions or corrections please send them to the Flora Committee for inclusion in the final publication of the atlas.

## Highlights

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## Key to Map Symbols

Closed circle [●] = there is a specimen for this area collected after 1980.

Open circle [○] = there is a specimen for this area collected before 1980.

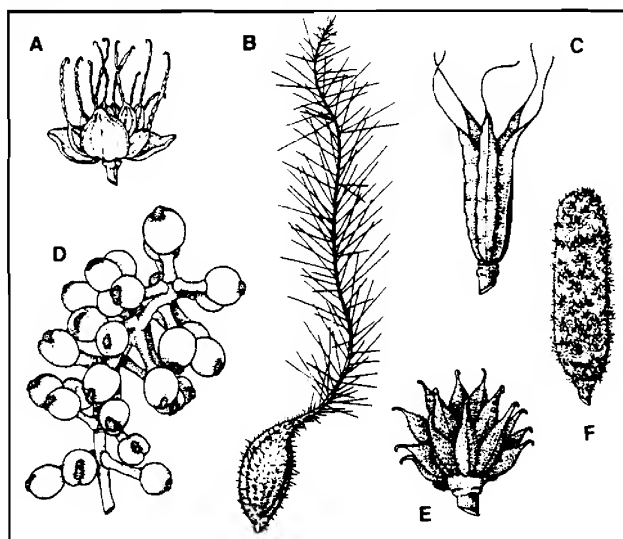
Closed square [■] = there is a specimen from this area collected before 1980 and a report (based upon a visual sighting or published literature report) from this area after 1980.

Closed triangle [▲] = there is a report (based upon a visual sighting or published literature report) from this area after 1980.

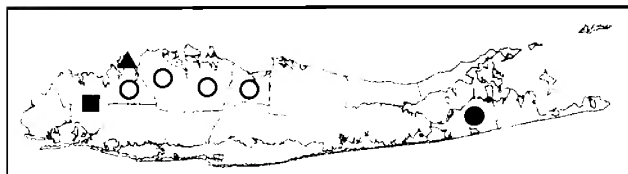
Open triangle [△] = there is a report (based upon a visual sighting or published literature report) from this area before 1980.

## Botany Quiz

Identify the fruits & seeds shown below; all are from LI species included in the Atlas of the Ranunculaceae (Illustrations from Mitchell & Dean (1982); Answers are on p. 39)



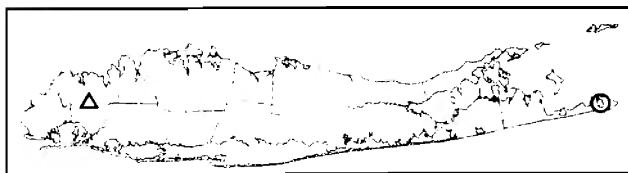
# Maps



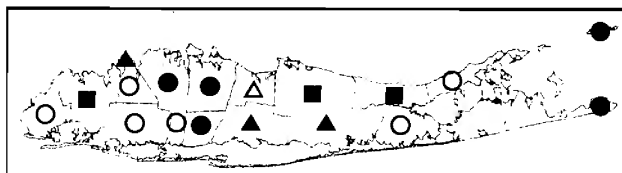
*Actaea pachypoda* Ell. - WHITE BANEBERRY  
Native



*Anemone nemorosa* L. - WOOD ANEMONE  
Alien



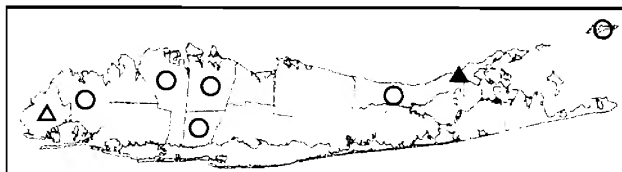
*Actaea rubra* (Ait.) Willd. - BANEBERRY  
Native



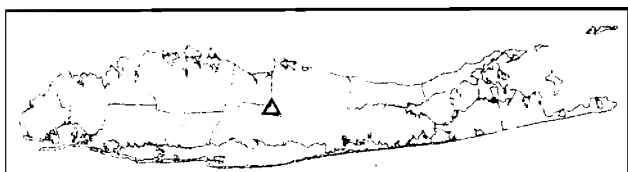
*Anemone quinquefolia* L. - WOOD ANEMONE  
Native



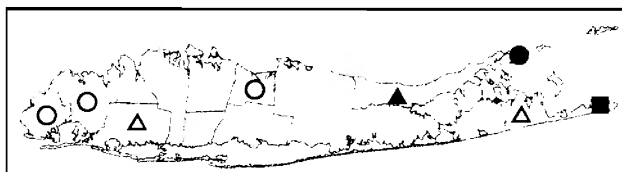
*Anemone americana* (DC.) H. Hara - BLUNT-LOBED HEPATICA  
Native



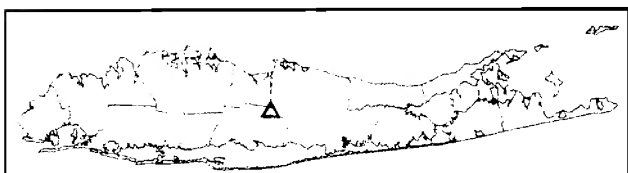
*Anemone virginiana* L. - THIMBLEWEED  
Native



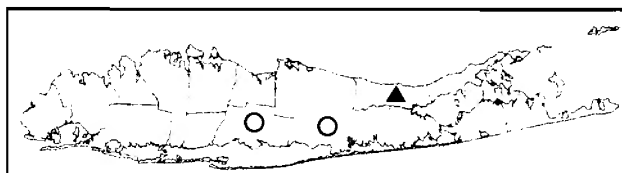
*Anemone canadensis* L. - CANADA ANEMONE  
Native



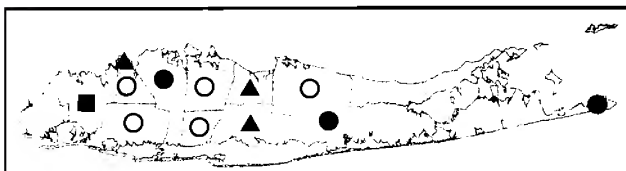
*Aquilegia canadensis* L. - WILD COLUMBINE  
Native



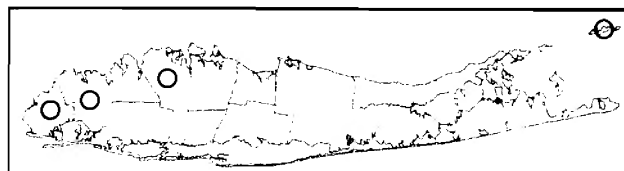
*Anemone cylindrica* A. Gray - THIMBLEWEED  
Native



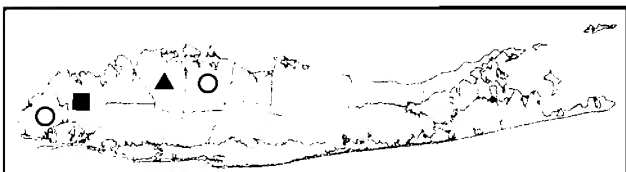
*Aquilegia vulgaris* L. - BLUE COLUMBINE  
Alien



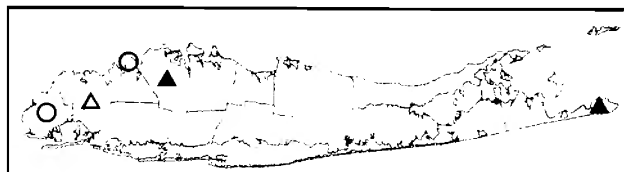
*Caltha palustris* L. - MARSH MARIGOLD  
Native



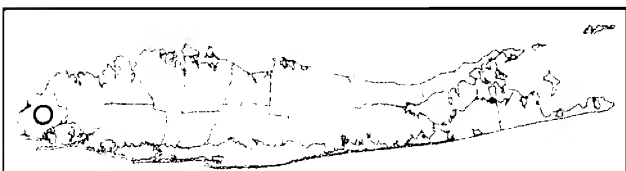
*Consolida ajacis* (L.) Schur - ROCKET LARKSPUR  
Alien



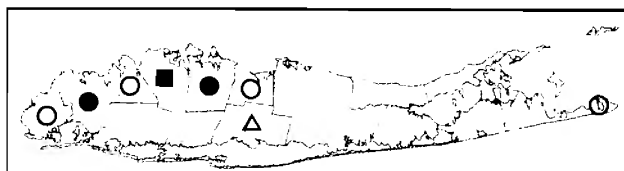
*Cimicifuga racemosa* (L.) Nutt. - BLACK SNAKEROOT  
Native



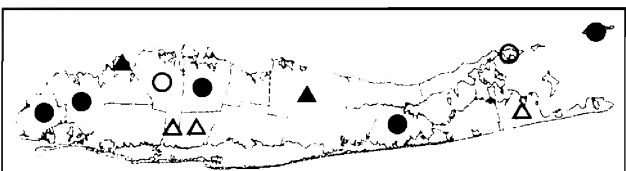
*Helleborus viridis* L. - GREEN HELLEBORE  
Alien



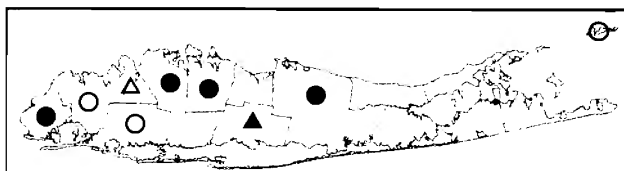
*Clematis ochroleuca* Ait. - CURLY-HEADS  
Native



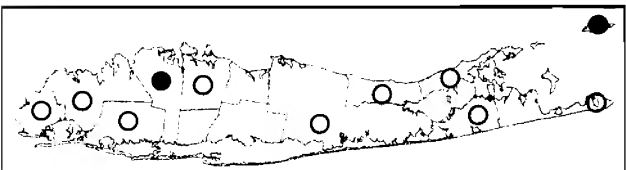
*Ranunculus abortivus* L. - KIDNEY-LEAF CROWFOOT  
Native



*Clematis terniflora* DC. - YAM-LEAF CLEMATIS  
Alien



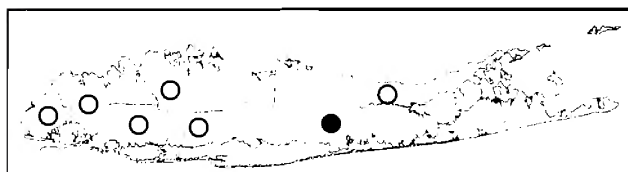
*Ranunculus acris* L. - COMMON BUTTERCUP  
Alien



*Clematis virginiana* L. - VIRGIN'S-BOWER  
Native



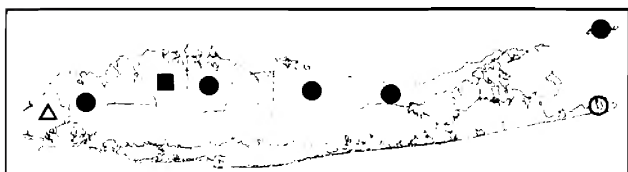
*Ranunculus ambigens* S. Wats. - AMERICAN SPEARWORT  
Native



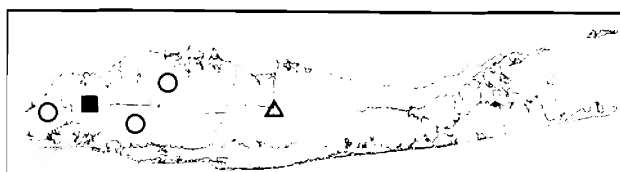
*Ranunculus aquatilis* L. var. *diffusus* Withering  
Native WHITE WATER-CROWFOOT



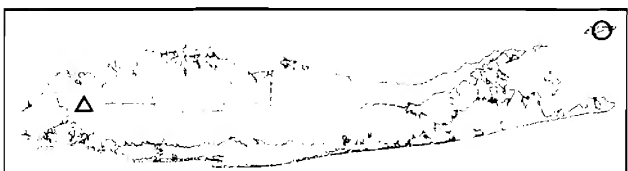
*Ranunculus flabellaris* Raf. ex Bigel.  
Native YELLOW WATER-CROWFOOT



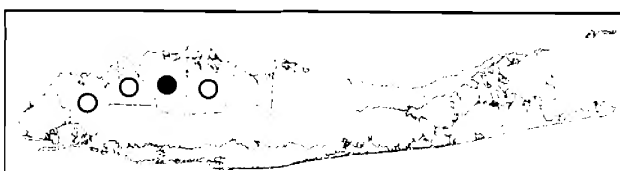
*Ranunculus bulbosus* L. - BULBOUS CROWFOOT  
Alien



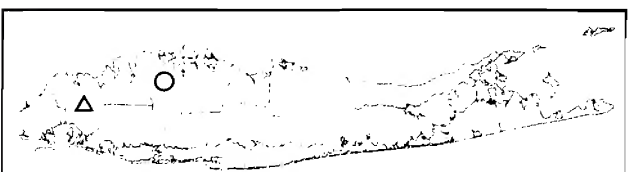
*Ranunculus hispidus* var. *caricetorum* (Green) Duncan  
Native SWAMP BUTTERCUP



*Ranunculus cymbalaria* Pursh - SEASIDE CROWFOOT  
Alien



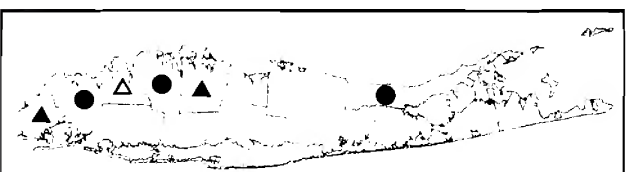
*Ranunculus hispidus* Michx. var. *hispidus* -  
Native HAIRY BUTTERCUP



*Ranunculus fascicularis* Muhl. ex Bigel. -  
Native EARLY BUTTERCUP



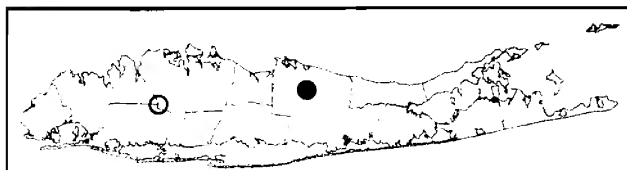
*Ranunculus hispidus* var. *nitidus* (Muhl. ex Ell.) Duncan  
Native SWAMP BUTTERCUP



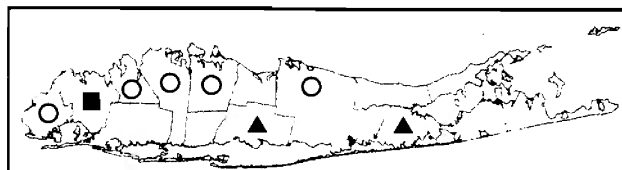
*Ranunculus ficaria* var. *bulbifera* Marsden-Jones -  
Alien LESSER CELANDINE



*Ranunculus micranthus* Nutt. in Torrey & A. Gray  
Native SMALL-FLOWERED CROWFOOT



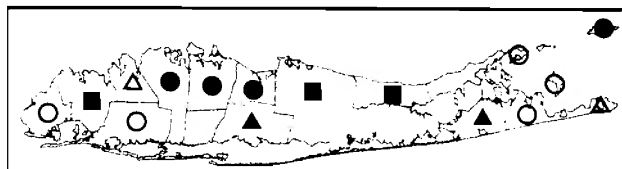
*Ranunculus pensylvanicus* L. f. -  
Native BRISTLY BUTTERCUP



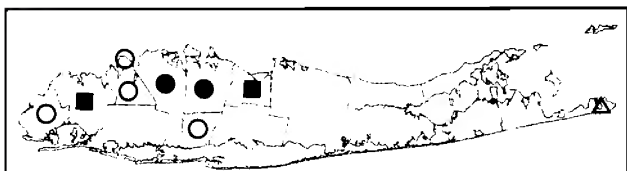
*Thalictrum dioicum* L. -  
Native EARLY MEADOW-RUE



*Ranunculus pusillus* Poir. in Lam. -  
Native LOW SPEARWORT



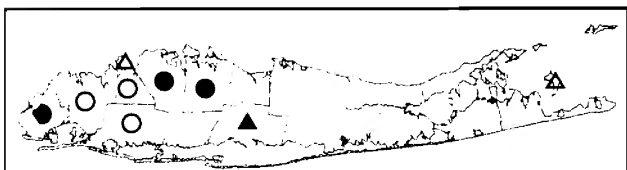
*Thalictrum pubescens* Pursh -  
Native TALL MEADOW-RUE



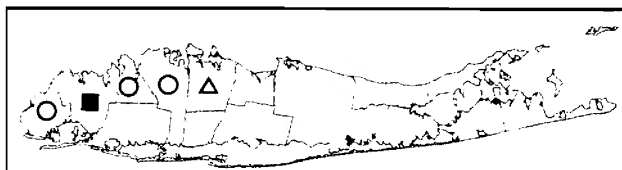
*Ranunculus recurvatus* Poir. in Lam. -  
Native HOOKED BUTTERCUP



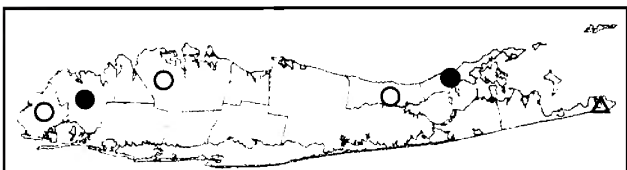
*Thalictrum revolutum* DC. -  
Native WAXY MEADOW-RUE



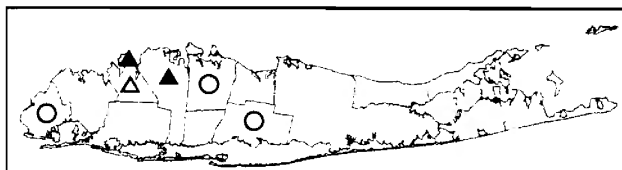
*Ranunculus repens* L. -  
Alien CREEPING BUTTERCUP



*Thalictrum thalictroides* (L.) Eames & Boivin -  
Native RUE ANEMONE



*Ranunculus scleratus* L. -  
Alien CURSED CROWFOOT



*Xanthorhiza simplicissima* Marsh -  
Native YELLOWROOT

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## Seabeach Amaranth Doing Well in 1997

A total of just under 8000 plants of the federally threatened seabeach amaranth (*Amaranthus pumilus*) were counted on Long Island beaches this year. Annual counts have taken place on Long Island since 1990 when the plant was rediscovered, and this year's count is the highest ever. Most plants are concentrated at two sites in western Nassau and eastern Queens counties but plants are found east to Westhampton Island.

Because North and South Carolina plants have suffered from numerous recent hurricanes **Long Island may have the most flowering plants in the world at this time.** The recent success of Long Island plants seems to be primarily due to the protection provided by the fencing of beaches for rare piping plovers and terns. Unfortunately there is constant pressure from beach users to reduce or eliminate these areas. The replenishment and movement of barrier island sands by the U.S. Corps of Engineers is another big unknown factor in the success of this plant. It probably provides new habitat in some areas and destroys habitat in others. We hope future research will provide new insights on the biology of this rare and interesting beach plant.

Steve Young, NY Natural Heritage Program

## Sexual Reproduction in American Chestnut on L.I.

The hand pollination of a group of flowering American chestnut trees in July (see LIBS newsletter, vol. 7: 28-29) bore seed this October. Some of these seeds (of Long Island stock) will be planted at Caleb Smith State Park and others will go on to American Chestnut Foundation research. Special thanks to Margaret Conover, Gary Chattam, and Ann Carter for properly identifying and locating these important trees.

John Potente, Hauppauge

## Recovery of Curly-Grass Fern on Eastern Long Island

Curly-grass fern (*Schizaea pusilla*) was first collected on Long Island by Roy Latham in the 1920's. But Latham's discovery went unnoticed by the botanical world for more than 30 years. In *Gray's Manual of Botany* (Fernald, 1950) curly-grass fern is listed as occurring in Newfoundland, Nova Scotia, and the pine barrens of New Jersey. Likewise, in *The New Britton and Brown Illustrated Flora*, Gleason (1952) reported curly-grass fern as "rare and local," in Newfoundland, Nova Scotia, Ontario, and New Jersey (the report from Bruce County, Ontario, has been subsequently discounted by most fern experts).

Harold and Andrew Moldenke's discovery of a second population of curly-grass fern at Napeague, Long Island, was the first published report from New York State (Moldenke, 1960; *Rhodora* 62: 294). Throughout the late 1960's and 1970's the two populations were monitored by local botanists including Joe Beitel, Henry Bookout, Ann Johnson, and Chris McKeever. Others knowledgeable of the site included Stanley Smith from the State Museum at Albany and Jim Montgomery from New Jersey.

Sometime around 1980 one of the two populations died out and has never recovered. Changes in local water drainage patterns may account for the loss of this population which was located in an open peaty depression adjacent to railroad tracks at Napeague.

Throughout the 1980's and early 1990's the remaining population of curly-grass fern thrived in a long, open moist swale in Napeague which Chris McKeever described as "undoubtedly the bed of the old wagon road to Montauk." During these years the population size varied between 40 to more than 100 individuals (Lamont, personal observation).

In 1995 Long Island suffered a severe drought. The long, moist swale at Napeague dried up. Plant leaves curled and turned brown. Cranberries shrivelled and withered away. The open swale baked in the intense summer heat; the effects of the drought on the fern population were devastating. During several visits to the site, I was able to locate only 6 plants; none had produced fertile fronds.

Normal amounts of precipitation fell on Long Island during late 1995 and the first six months of 1996. But intense searches by several botanists revealed only two individuals of *Schizaea* at the "long swale" locality in Napeague. It was feared that New York might lose its last known population of curly-grass fern.

Monthly surveys from June to October 1997, revealed a substantial recovery of *Schizaea* at Napeague. Twenty-



four individuals were observed at the long swale locality and a new sub-population, consisting of three individuals, was discovered 350 to 400 feet east of the main population. Approximately half the individuals had produced fertile fronds.

Yearly surveys of the historical "railroad track" population have revealed no signs of recovery; the last documented occurrence of curly-grass fern from that locality was in September 1978 (Ann Johnson, personal communication). The site is consistently drier than it used to be and the area is slowly succeeding into a shrubland.

Curly-grass fern is notoriously difficult to find, searches are often conducted on hands and knees even in areas where it is known to occur. It is possible that additional populations of *Schizaea* may occur scattered throughout the numerous isolated moist swales and depressions at Napeague.

Acknowledgments: Appreciation is expressed to Jim Ash, Henry Bookout, and Ann Johnson for assistance in field surveys and for sharing historical information. I am indebted to the late Joe Beitel who first shared with me the locality of *Schizaea* at Napeague.

Eric Lamont, Riverhead

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## Society News

### *LIBS Elections 1997*

The Nominating Committee has submitted the following slate of candidates to serve as officers during 1998 and 1999:

President.....	Eric Lamont
Vice President.....	Skip Blanchard
Treasurer.....	Carol Johnston
Recording Secretary.....	Barbara Conolly
Corresponding Sec'y.....	John Potente

Elections will take place during the monthly meeting of 11 November 1997. As stated in the by-laws, chairpersons of each committee are not voted into office, but appointments are confirmed by the Executive Board.

**Vincent Puglisi**, Chairperson  
Nominating Committee

## *Executive Board Meeting*

A meeting of the Executive Board will be held on 11 Nov. 1997 at 6:15 pm (before the monthly meeting and program) at the Bill Paterson Nature Center, Muttontown Preserve. All members are welcome.

## *Lost Newsletters?*

For some unexplained reason several members did not receive the last issue of the newsletter (Sept/Oct 1997; vol. 7, no. 5). If you did not receive your copy, please contact Eric Lamont at 516/722-5542.

## *Field Trip Report*

### *Aquatic Plants of Eastern Long Island*

On 23 August 1997, **Dr. Alfred Schuyler** from the Academy of Natural Sciences of Philadelphia presented a workshop on identification of aquatic plants. Sixteen LIBS members participated. The afternoon field trip consisted of visits to Sweezy Pond (south of Riverhead), Peconic River, Sandy Pond (Calverton), and Carmans River. The following aquatic plants were observed (nomenclature follows Mitchell & Tucker, 1997): water-shield (*Brasenia schreberi*), fanwort (*Cabomba caroliniana*), four species of spikerush (*Eleocharis acicularis*, *E. microcarpa*, *E. flavescens*, *E. robbinsii*), pipewort (*Eriocaulon aquaticum*), Tuckerman's quillwort (*Isoetes tuckermanii*), duckweed (*Lemna minor*), yellow pondlily (*Nuphar variegata*), white waterlily (*Nymphaea odorata*), floating-heart (*Nymphoides cordata*), arrowleaf (*Peltandra virginica*), pickerel-weed (*Pontederia cordata*), three species of pondweed (*Potamogeton epihydrus*, *P. perfoliatus*, *P. spirillus*), white water-crowfoot (*Ranunculus trichophyllus*), quill-leaf arrow-head (*Sagittaria teres*), chairmaker's rush (*Scirpus pungens*), clubrush (*Scirpus subterminalis*), bur-reed (*Sparganium eurycarpum*), giant duckweed (*Spirodela polyrhiza*), three species of bladderwort (*Utricularia cornuta*, *U. fibrosa*, *U. purpurea*), tapegrass (*Vallisneria americana*), watermeal (*Wolffia brasiliensis*), and large yellow-eyed grass (*Xyris smalliana*).

Eric Lamont, Riverhead

## *Answers to Botany Quiz (from page 33)*

A. Early Meadow-rue (*Thalictrum dioicum*); B. Virgin's-bower (*Clematis virginiana*); C. Wild Columbine (*Aquilegia canadensis*); D. White Baneberry (*Actaea pachypoda*); E. Wood Anemone (*Anemone quinquefolia*); F. Thimbleweed (*Anemone cylindrica*).

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## LONG ISLAND BOTANICAL SOCIETY

Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Skip Blanchard
Treasurer	Carol Johnston
Rec'd Sec'y	Barbara Conolly
Cor'sp Sec'y	Jane Blanchard
Local Flora	Steven Clemants
Field Trip	Glenn Richard
	Allan Lindberg
Membership	Lois Lindberg
Conservation	John Turner
	Louise Harrison
Education	Mary Laura Lamont
	Thomas Allen Stock
Hospitality	Betty Lotowycz
Program	Skip Blanchard
	Steven Clemants
Editor	Eric Lamont

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### Membership

Membership is open to all, and we welcome new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership Chairperson, 45 Sandy Hill Road, Oyster Bay, NY 11771-3111

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## PROGRAMS

11 November 1997 - 7:30 pm\*

**Dr. Steven Clemants**

(Brooklyn Botanic Garden)

**"Plants of the Ukraine"**

A slide show of plants of the Carpathian Mts., and other regions of the Ukraine

**Location:** Bill Patterson Nature Center, Muttontown Preserve, East Norwich

9 December 1997 - 7:30 pm\*

**Dr. Margery Oldfield**

(Director, Seatuck Research Program)

**"Values & Uses of Plant Diversity"**

Why is biodiversity such an important issue these days? Find out as Dr. Oldfield explains, using local, national and global examples.

**Location:** Museum of L.I. Natural Sciences, Room 137, SUNY at Stony Brook.

\*Refreshments & informal talk begin at 7:30pm, the meeting starts at 8pm. For directions to: 1) Muttontown Preserve call 516/571-8500; 2) MOLINS, call 516/632-823 0.

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## LONG ISLAND BOTANICAL SOCIETY

c/o Muttontown Preserve

Muttontown Lane

East Norwich, New York 11732

